made more accessible, comprehensible and valuable by the expression of the invention described in this section.

In the domain of large-scale digital environments, these environments force most users to spend more time wrestling with the environment than they may save, because the average person neither understands the environment's full potential nor knows how to harness it. For many, the initial attempt to master such an environment increases one's sense of chaos rather than one's achievements. The enormous amount of information available globally appears as a vast electronic jumble. To paraphrase and modernize T. S. Eliot, "Where is the wisdom? Lost in the knowledge. Where is the knowledge? Lost in the information. Where is the information? Lost in the computer."

Instead of needing access to all information available everywhere, people generally need to obtain the right piece of information, or the right set of features and capabilities, at the right time in order to achieve their current task(s). Since locating those "needles in a haystack" is complex in most digital environments, most people wind up using these new digital environments as personal extensions (through services such as electronic mail and file storage) rather than enhancers that enable them to immediately learn how to make "best practice" leading-edge contributions from each other. From a quantitative view, instead of predictable and measurable benefits, large new digital environments evolve in unpredictable qualitative ways and must be researched simply to learn the nature and formation of their electronic communities and their users' gains and losses in productivity.

This invention may make a range of contributions by providing environment-wide learning and feedback systems that accelerate the evolution of meaningful and valuable patterns of interaction, as well as broad access to those patterns. In addition, this accelerates understanding of the emerging patterns of use by providing visibility into the actual use of the environment as well as the resulting achievements of its users. Thus, it consolidates learning into repeatable examples and models which others may follow virtually immediately. Since these feedback systems may operate on the scale of work groups, products, services, organizations, societies or globally the rate of learning, and the resulting performance improvements, may be increased beyond what such digital environments, and products and services, could otherwise provide.

Examples of such systems could be based on one or more dynamically evolving repositories of user value judgments and navigational pointers that identify the most valuable information available in digital environments of various sizes. For discussion purposes, let us call these Value Locator Repositories, or VLR's. In a generalized instantiation these VLR's could be available on-line and on demand as a dial-in service. In an instantiation that is integrated with the software tools one uses to do work, there could be dynamic links between such a VLR(s) and those tools (where those tools may be enabled for communications with VLR's, or such VLR's may be attached or built into such tools) so that the appropriate pointers to support information from throughout the appropriate digital environment would be displayed automatically at appropriate moments during one's work and users could link to any particular source in one step, regardless of its location worldwide); etc. In a local instantiation, the pointers to a local or product-based VLR(s) could be built into a software application (such as a spreadsheet), a product (such as a medical monitor) or a service (such as a time-sharing computer system) to provide direct access to repositories of content, how-to and other "performance enhancing" information for the product's users in a particular business

work group, organization, professional association, users of a particular vendor's product, etc.

By means of this invention, such Value Locator Repositories (VLRs) could dynamically and actively (1) prompt users to contribute additional new learning based on their experiences, and (2) report to users the valuable functions and content discovered by other users of that digital environment. The VLR's would be rapidly adjusted, by either automated or manual means (or both) to reflect recent user experiences and thus reveal what users currently judge to be the most valuable and important information, functions and operations in this environment. Those value, navigation and performance access, along with prompting to continuously learn the value of those pointers to new users and thereby evolve those recommendations, would then be updated in a dynamic learning system(s) throughout the digital environment(s). This accelerated evolution could take place on a dial-in basis, while users work with any tool capable of displaying such information, or in other ways.

For discussion purposes, let us call one such VLR a "VLR Server" and describe it as if such a VLR Server operated as a free service on the Internet. In this example, personal, organizational or societal "Value Location" might be offered as a continuous service that evaluates the value of the enormous and rapidly expanding base of information available throughout the Internet, along with direct navigational access to it. In practice, there may be multiple VLR Servers in a digital environment; their characteristics and operations may be considerably more flexible than the example described here; and they may be embedded in or attached to other types of systems, organizations and business processes to provide specialized types of Value Location for particular types of users; in addition to the particular instantiation described here. Turning to FIG. 34A, a user logs on to the VLR Server **1170** to locate addresses of valuable information sources along with descriptions of them **1172**. These descriptions would display the rankings, comments and ratings of the environment's information resources based on prior uses of them **1194**. While logged on the user could use an information source by linking directly to it (e.g., immediately following the navigational pointer to it provided by the VLR Server) **1174**, or the user could download one or more VLR addresses and descriptions to a holding "corral" or other local repository on the user's own system **1174**. If the user employed any of the VLR Server's pointers while logged in **1176**, appropriate CB-PD Module interactions would be run immediately **1178, 1180**.

Alternatively, the user could download one or more of the VLR Server's pointers and descriptions **1182** to a local corral on the user's system **1184**. During this download the user would receive a "mobile" CB-PD Module that would be stored on the user's system **1184** (such as in the corral of VLR choices). In this latter case, the user could turn to this local corral at any time **1202** to learn whether appropriate resources are available for a particular task. If not, the user may exit this corral **1206**. If the user selects a choice in the corral **1204** the mobile CB-PD Module is "attached" to the user's actions with those "value locations" and related uses of the digital environment (as described in the preferred embodiment). Based on the user's actions, at appropriate trigger events CB-PD Module interactions are run **1208** to learn the user's assessments of the information resources found, and the user's suggestions for improving the listing in the VLR Server **1210**. While this may be as simple as a value assessment (a subjective ranking of the value of each information resource) and/or a frequency assessment (a quantitative count of how